Comments of the
Solar Energy Business Association of New England
regarding the
RPS Carve-Out for On-Site Generation

October 15, 2008

BACKGROUND

Section 32 of the Green Communities Act (the "Act") creates a "carve out" in the Renewable Portfolio Standard ("RPS") for on-site renewables. Under the carve out, retail suppliers must meet a portion (to be determined by the Division of Energy Resources ("DOER")) of their RPS obligation with energy from on-site generators of 2 MW or less that are located in Massachusetts and began operation after December 31, 2007.

The Act directs "DOER" to promulgate regulations to implement the carve-out. The Solar Energy Business Association of New England ("SEBANE") offers the following recommendations to DOER.

Technology Specific Requirements

DOER should establish one ACP level and minimum percentage requirement and for solar and a separate ACP level and percentage requirement for other on-site technologies. It is necessary to set a separate ACP for solar because the economics of solar projects are markedly different from the economics of other on-site renewable technologies. The "right" ACP number for solar is the "wrong" number for the other technologies and vice versa.

Where a separate ACP level is established, it is necessary to establish a separate minimum percentage requirement as well. Otherwise, there would be no need for suppliers ever to purchase energy from, or pay the ACP relating to, solar. Instead, they would be able to satisfy their entire on-site requirement with the lower cost technologies.

For a discussion of the benefits of a solar carve out in the RPS, see Wiser, R., **Renewable Portfolio Standards in the United States**, pp. 16 – 20 (April 2008), available at http://eetd.lbl.gov/ea/ems/reports/lbnl-154e.pdf; and Wiser, R., ***The Treatment of Solar Electricity in Renewables Portfolio Standards***, (April 2007), available at http://eetd.lbl.gov/ea/ems/reports/pv-rps-set-asides-2007.pdf

Minimum Percentage Requirements

In setting the minimum percentage requirements, DOER should consider the following principles:

- Set targets that are achievable assuming a realistic rate of industry growth. It is reasonable to plan that installations will increase by 50% or even 100% from year to year. However, it may not be realistic to plan that installations will quadruple from year to year.

- Set the minimum percentage requirement for solar to meet the Administration's goal of 250 MW of solar by 2017. [1]

Alternative Compliance Payment

In setting the ACP, DOER should consider the following principles:

- ***Base*** the ACP on the price premium (above standard electricity prices) required to make on-site renewable generation economic.
    - For solar, base the ACP on the price premium required for large scale, commercial projects, e.g. projects of 50 kW and greater.
    - As this will not be sufficient for higher cost projects, e.g., residential and small commercial, use Renewable Energy Trust or ACP funds to offer an incentive to those projects to make up the difference.
- ***Set*** the ACP above the necessary price premium to incentivize load serving entities to purchase energy from on-site generators rather than pay the ACP. The goal is to spur project development and create a market for on-site RECs that trade below the ACP.
- Establish a long-term ACP to provide price certainty.
- Dedicate ACP revenues relating to the on-site carve-out to the support of on-site renewable projects.

New Jersey has followed these principles in establishing its Solar Renewable Energy Certificate (SREC) Program. Decision and Order regarding Solar Electric Generation, New Jersey Board of Public Utilities, Docket No. EO06100744 (December 6, 2007). New Jersey:

- Set a "target" SREC price of $611/MWh. The target was based on an analysis of the SREC price needed to generate an IRR of 12% for projects of 10 kW and greater. The Board concluded that this was the minimum IRR needed to attract private investment in solar.
- Set the ACP at $711/MWh -- $100 above the target SREC price – to give electricity suppliers an incentive to purchase SRECs rather than paying the ACP.
- Set a rolling 8-year ACP schedule to provide certainty to the market. In the initial 8-year schedule, the price declines by 3% per year to reflect projected decreases in solar prices. Each year, New Jersey will set the price for the eighth year.
- Established a rebate program for systems under 50 kW to supplement the SREC revenue for those systems in light of their higher costs.

Securitization

A long-term ACP schedule will provide some price certainty. However, market participants will still face price risks due to: a) regulatory uncertainty (future regulators can change the ACP schedule and even the percentage requirements) and b) market uncertainly (the ACP sets the price ceiling but not the price floor). Accordingly, as the NJ BPU observed, there is general consensus that a long-term ACP schedule

[1] The 250 MW equates to less than 0.5% of retail load. Many states have adopted much more aggressive goals. These include California (1.5% or 3000MW), New Jersey (2.1% or 1700 MW), Arizona (2% or 1600 MW), Maryland (2% or 1500MW), New Mexico (3.1% or 420MW), Ohio (820MW), and Pennsylvania (690MW).

"on its own would not provide the level of confidence in SREC values that the market needs." Id at 15. Without the needed market confidence, costs will be higher and growth slower.

For this reason, New Jersey has directed its utilities to enter long-term contracts for solar RECs. In the Matter of the Renewable Energy Standard, New Jersey Board of Public Utilities, Docket No. EO006100744 (August 7, 20008). Under the New Jersey proposal, utilities will purchase SRECs under 15-year contracts through an auction mechanism. The utilities will then sell the SRECs to load serving entities to be used for RPS compliance.

Massachusetts should adopt a similar program, or other securitization mechanism, to ensure the success of the on-site carve out.